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**Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/160,581	09/25/98	ISHIKAWA	R 0041 0019-3

022850 QM12/0727  
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EXAMINER

CHANG, R

ART UNIT	PAPER NUMBER
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3729

10

DATE MAILED: 07/27/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/160,581**

Applicant(s)  
**Ishikawa et al**

Examiner  
**Rick Kiltae Chang**

Group Art Unit  
**3729**



☒ Responsive to communication(s) filed on May 8, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), ~~or thirty days~~, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 5-10 ~~is/are~~ are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 5-10 ~~is/are~~ are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 3729

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 5-10 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for cutting fiber, does not reasonably provide enablement for  $\beta \leq -253a + 65$ . The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. If  $a$  is 0.5 mm, then  $\beta$  equals -61.5 mm/minute. It is impossible to operate at speed less than 0 mm/minute. Applicants fail to disclose the range of “a” which the invention will operate.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3729

5. Claims 5-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5, line 3: the " $\beta \leq -253a + 65$ " limitation renders the claims vague and indefinite. The limitation fails to recite limits for the variable "a". Therefore, the blade moving speed reaches beyond conventional levels, such as speeds less than 0 mm/minute.

Claim 6 recites the limitation "the step of heating" in line 1. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Fellows et al (US 4,790,465).

Fellows discloses a cutting blade (3) having a blade thickness (see Fig. 1) at a speed (Figs. 3-5) close to 0 mm/minute. Fellows satisfies the expression " $\beta \leq -253a + 65$ ." Further, Fellows discloses a cutting blade holder (4), an optical fiber supporter (1), a speed reducing device (5), and a drive force transmission device (561).

Art Unit: 3729

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fellows et al (US 4,790,465) in view of Logan et al (US 4,262,417).

Fellows fails to disclose heating the cutting blade.

Logan discloses heating the cutting blade (Fig. 7) thereby providing a smooth cut surface.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fellows by heating the cutting blade as taught by Logan thereby providing a smooth cut surface.

9. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fellows et al (US 4,790,465) in view of Marks (US 3,783,726).

Fellows fails to disclose a motor and a plurality of speed reducing gears.

Marks discloses a motor (3) and a plurality of speed reducing gears (9) thereby reducing the speed from the source to the target.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fellows by providing a motor and a plurality of speed reducing gears as taught by Marks thereby reducing the speed from the source to the target.

Art Unit: 3729

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fellows et al (US 4,790,465)/Marks (US 3,783,726) as relied upon claims above, and further in view of Burns (US 5,850,773).

Fellows/Marks fail to disclose a cam and a cam follower.

Burns discloses a cam and a cam follower (col. 1, lines 35-38 and Figs. 6-8) thereby providing relatively easy to establish a properly timed relationship between the action of the knife and the action of the cam follower (col. 1, lines 55-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fellows/Marks by providing a cam and a cam follower as taught by Burns thereby providing relatively easy to establish a properly timed relationship between the action of the knife and the action of the cam follower.

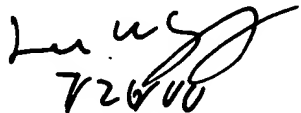
### *Conclusion*

11. Examiner requests the applicants to provide examiner-friendly written communication by providing support in the specification for any changes to the claims.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Chang whose telephone number is (703) 308-4784. The examiner can normally be reached on Monday thru Friday from 5:00 AM to 1:30 PM.

rc

July 25, 2000

  
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